## REMARKS

In the final Office Action, the Examiner rejected claims 1-14, 16-19, and 25-33 under 35 U.S.C. § 103(a) as unpatentable over Shultz et al. (U.S. Patent Application Publication No. 2003/0061211) in view of Michalewicz et al. (U.S. Patent Application Publication No. 2002/0042789); and rejected claims 15 and 20-24 under 35 U.S.C. § 103(a) as unpatentable over Shultz et al. in view of Michalewicz et al. and Rubenczyk et al. (U.S. Patent Application Publication No. 2003/0217052).

By this Amendment, Applicants propose amending claims 1, 27-30, 32, and 33 to improve form. Applicants respectfully traverse the Examiner's rejections under 35 U.S.C. § 103. Claims 1-33 remain pending.

*REJECTION UNDER 35 U.S.C. § 103 BASED ON*
*SHULTZ ET AL. AND MICHALEWICZ ET AL.*

In paragraph 7 of the final Office Action, the Examiner rejected claims 1-14, 16-19, and 25-33 under 35 U.S.C. § 103(a) as allegedly unpatentable over Shultz et al. in view of Michalewicz et al. Applicants respectfully traverse the rejection.

Amended independent claim 1, for example, is directed to a method for clustering by address. The method comprises receiving a search query that includes one or more keywords; obtaining one or more geographical identifiers; identifying an area of interest based, at least in part, on the one or more geographical identifiers; identifying documents that are associated with addresses located within the area of interest; determining ones of the identified documents that match the one or more keywords as relevant documents; grouping the relevant documents into clusters based, at least in part, on the addresses associated with the relevant documents, each of a

plurality of the clusters corresponding to one of the addresses; and presenting the clusters.

Neither Shultz et al. nor Michalewicz et al., whether taken alone or in any reasonable combination, discloses or suggests the combination of features recited in claim 1. For example, neither Shultz et al. nor Michalewicz et al. discloses or suggests grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses.

The Examiner admitted that Shultz et al. does not disclose or suggest grouping relevant documents into clusters, but alleged that Michalewicz et al. discloses grouping relevant documents into clusters based, at least in part, on addresses located within the area of interest, and cited paragraph 0033 of Michalewicz et al. for support (final Office Action, page 7). Applicants respectfully submit that Michalewicz et al. does not disclose grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as recited in claim 1.

At paragraph 0033, Michalewicz et al. discloses:

> The method includes providing a query and analyzing the query in order to create a query pattern. A document source is then searched for documents which match the query pattern. The retrieved documents are divided into subsets of similar documents, where each subset of the subsets of similar documents is described in terms of a subset pattern. An ordered list of clusters is provided based on the subset pattern of each subset of similar documents. The ordered list of clusters includes separate clusters which contain similar documents retrieved in response to the query.

In this section, Michalewicz et al. discloses creating a query pattern, searching for documents that match the query pattern, and dividing the retrieved documents into subsets of similar documents, where each subset is described in terms of a subset pattern. Nowhere in this

paragraph, or elsewhere, does <u>Michalewicz et al.</u> disclose or remotely suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as required by claim 1.

The Examiner alleged that the text of paragraph 0033 in <u>Michalewicz et al.</u> "clearly indicates that grouping the relevant documents into clusters are the retrieved documents are divided into subsets of similar documents and at least in part on the address located within the area of interest is a type of subset pattern" (final Office Action, page 7). Applicants submit that the disclosure of <u>Michalewicz et al.</u> provides absolutely no support for the Examiner's allegation. <u>Michalewicz et al.</u> discloses a subset pattern as a "logical or" of two query patterns, a "logical and" of two query patterns, a "logical difference" of two query patterns, a "logical or" of a query pattern and a string, a "logical and" of a query pattern and a string, or a "logical difference" between a query pattern and a string (paragraphs 0034-0040). In fact, <u>Michalewicz et al.</u> does not disclose anything remotely similar to grouping relevant documents into clusters based, at least in part, on <u>addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses,</u> as required by claim 1.

Applicants identified these deficiencies in the Examiner's rejection in Applicants' prior response. In response to Applicants' arguments, the Examiner identified several new sections of <u>Michalewicz et al.</u> that supposedly disclose grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents (final Office Action, page 4). For example, the Examiner identified paragraphs 0089, 0095, 0101, and 0107-0116 of <u>Michalewicz et al.</u> as allegedly disclosing the above-identified feature of claim 1 (final Office

Action, page 4). Applicants respectfully submit that the Examiner's allegations lack merit.

At paragraph 0089, <u>Michalewicz et al.</u> discloses:

> The Dialog Control module 300 offers an intelligent dialog between the user and the search process; that is, the Dialog Control module 300 allows interactive construction of an approximate description of a set of documents requested by a user. Using the knowledge built by the Data Preparation module 200, based on optimal document representation, the user is presented with clusters of documents that guide the user in logically narrowing down the search in a top-down manner. This mechanism expedites the search process since the user can exclude irrelevant sites or sites of less interest in favor of more relevant sites that are grouped within a cluster. In this manner, the user is precluded from having to review individual sites to discover their content since that content would already have been identified and categorized into clusters. The function of the Dialog Control module 300 may thus support the user with tools that enable an effective construction of the search query within the scope of interest. The Dialog Control module 300 may also be responsible for content-related dialog with the user.

In this section, <u>Michalewicz et al.</u> discloses that the user is presented with clusters of documents that guide the user in logically narrowing down the search in a top-down manner and expedites the search process since the user can exclude irrelevant sites or sites of less interest in favor of more relevant sites that are grouped within a cluster. Nowhere in this section, or elsewhere, does <u>Michalewicz et al.</u> disclose or remotely suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as required by claim 1.

The Examiner alleged that paragraph 0089 of <u>Michalewicz et al.</u> "clearly indicates that where clustering is a process that logically narrows down the search so that the user can exclude irrelevant site or sites of less interest and in favor of more relevant sites that are grouped within the cluster" (final Office Action, page 4). Regardless of the accuracy of the Examiner's allegation, Applicants submit that the Examiner is simply providing an alleged benefit of clustering without addressing the features of claim 1. Claim 1 does not recite merely clustering documents so that a user can exclude irrelevant sites or sites of less interest in favor of more

relevant sites.  Instead, claim 1 specifically recites grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as required by claim 1.

In paragraphs 0095-0116, Michalewicz et al. discloses a clustering function that generates a list of clusters and a class function that creates patterns.  Nowhere in these sections, or elsewhere, does Michalewicz et al. disclose or remotely suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as required by claim 1.

The Examiner alleged that paragraphs 0095-0116 of Michalewicz et al. disclose that "the address in clustering by address is just a parameter and an intended use of the prior art" and that a "recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art" (final Office Action, page 4).  Applicants respectfully submit that the Examiner has misinterpreted the disclosure of Michalewicz et al. and that the Examiner's "intended use" allegation lacks merit.  At best, Michalewicz et al. may be relied upon for disclosing grouping documents into clusters (Abstract).  Michalewicz et al. cannot reasonably be relied upon to disclose or remotely suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, as required by claim 1.  As a result, Michalewicz et al. cannot further disclose where each of a plurality of the clusters corresponds to one of the addresses, as further required by claim 1.

Further, even assuming, for the sake of argument, that Michalewicz et al. discloses determining different patterns from a search query and forming clusters based on these different

patterns (points that Applicants do not concede), as alleged by the Examiner, <u>Michalewicz et al.</u> does not disclose or remotely suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as required by claim 1. Therefore, even if an address (e.g., Fairfax, Virginia) was included in the search query in <u>Michalewicz et al.</u> and that address was included in a pattern from which a cluster was formed (none of which is disclosed or suggested by <u>Michalewicz et al.</u>), a single cluster might be formed for that particular address (e.g., a cluster of documents including the words "Fairfax Virginia"), but no reasonable allegation can be made that a cluster would be formed for any other address. Thus, even considering all of these assumptions, <u>Michalewicz et al.</u> still would not disclose or remotely suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, as required by claim 1. In light of this, Applicants submit that the grouping of relevant documents into clusters based, at least in part, on addresses associated with the relevant documents is NOT an intended use of the disclosure of <u>Michalewicz et al.</u>, as alleged by the Examiner.

Because <u>Shultz et al.</u> and <u>Michalewicz et al.</u> do not disclose or suggest grouping relevant documents into clusters based, at least in part, on addresses associated with the relevant documents, where each of a plurality of the clusters corresponds to one of the addresses, <u>Shultz et al.</u> and <u>Michalewicz et al.</u> cannot disclose or suggest presenting the clusters, as further required by claim 1.

For at least these reasons, Applicants submit that claim 1 is patentable over <u>Shultz et al.</u>

and <u>Michalewicz et al.</u>, whether taken alone or in any reasonable combination. Claims 2-14, 16-19, 25, and 26 depend from claim 1 and are, therefore, patentable over <u>Shultz et al.</u> and <u>Michalewicz et al.</u> for at least the reasons given with regard to claim 1. Claims 2-14, 16-19, 25, and 26 are also patentable over <u>Shultz et al.</u> and <u>Michalewicz et al.</u> for reasons of their own.

For example, claim 19 recites placing at least one of the relevant documents into a plurality of the clusters. Neither <u>Shultz et al.</u> nor <u>Michalewicz et al.</u>, whether taken alone or in any reasonable combination, discloses or suggests this feature.

The Examiner admitted that <u>Shultz et al.</u> does not disclose or suggest the feature of claim 19, but alleged that <u>Michalewicz et al.</u> discloses this feature and cited paragraph 0132 of <u>Michalewicz et al.</u> for support (final Office Action, page 17). Applicants disagree.

In paragraph 0132, <u>Michalewicz et al.</u> discloses:

> In step 605, the user identifies keywords or presents a complete query (e.g., house AND project). The documents will be retrieved (from the database) on the basis of these keywords (index match). In step 610, the query and/or keywords are analyzed and a "pattern" is created. In step 615, the database is searched for documents which match the pattern. In step 620, the retrieved documents are divided into subsets of similar documents, where each subset is described by its own pattern. In other words, the process creates an ordered list of clusters. In step 625, the user is provided with an initial solution proposal.

In this section, <u>Michalewicz et al.</u> discloses that a pattern is created from the query and/or keywords, a database is searched for documents that match the pattern, and the retrieved documents are divided into subsets of similar documents, where each subset is described by its own pattern. Contrary to the Examiner's allegation, nowhere in this section, or elsewhere, does <u>Michalewicz et al.</u> disclose or suggest placing at least one of the documents into a plurality of the clusters, as required by claim 19.

The Examiner alleged that paragraph 0132 of <u>Michalewicz et al.</u> "clearly indicates that a

plurality of clusters is an ordered list of clusters" (final Office Action, page 17). Regardless of the accuracy of the Examiner's allegation of what <u>Michalewicz et al.</u> discloses, Applicants submit that the Examiner is not addressing the feature recited in claim 19. Claim 19 does not recite creating an ordered list of clusters, but instead recites placing at least one of the relevant documents into a plurality of the clusters. Neither <u>Shultz et al.</u> nor <u>Michalewicz et al.</u> discloses or suggests this feature.

The Examiner did not address similar arguments when presented by Applicants in a prior response. Instead, the Examiner classified Applicants' arguments as "completely irrelevant" (final Office Action, page 5). Applicants remind the Examiner that where Applicants traverse a rejection and the Examiner maintains the rejection, the Examiner needs to answer the substance of Applicant's argument (M.P.E.P. 707.07(f)).

For at least these additional reasons, Applicants submit that claim 19 is patentable over <u>Shultz et al.</u> and <u>Michalewicz et al.</u>, whether taken alone or in any reasonable combination.

Amended independent claims 27-30 recite features similar to, but possibly different in scope than, features recited in claim 1. Claims 27-30 are, therefore, patentable over <u>Shultz et al.</u> and <u>Michalewicz et al.</u>, whether taken alone or in any reasonable combination, for at least reasons similar to reasons given with regard to claim 1. Claim 31 depends from claim 30 and is, therefore, patentable over <u>Shultz et al.</u> and <u>Michalewicz et al.</u> for at least the reasons given with regard to claim 30.

Amended independent claim 32 is directed to a method for forming search results. The method comprises receiving a search query that includes one or more keywords and at least one portion of a telephone number; identifying documents that are associated with telephone

numbers that match the at least one portion of the telephone number; determining ones of the

identified documents that match the one or more keywords as relevant documents; grouping the

relevant documents into clusters based, at least in part, on the telephone numbers included in the

relevant documents, each of a plurality of the clusters corresponding to one of the telephone

numbers; and presenting the clusters as the search results.

Neither Shultz et al. nor Michalewicz et al., whether taken alone or in any reasonable

combination, discloses or suggests the combination of features recited in claim 32. For example,

Shultz et al. and Michalewicz et al. do not disclose or suggest grouping the relevant documents

into clusters based, at least in part, on the telephone numbers included in the relevant documents,

and do not further disclose or suggest that each of a plurality of the clusters corresponds to one

of the telephone numbers.

The Examiner did not address this feature previously recited in claim 32 and, therefore,

did not establish a prima facie case of obviousness with regard to claim 32.

In response to this argument, the Examiner alleged that "using telephone numbers is

again the intended use of the prior art" (final Office Action, page 5). Applicants respectfully

submit that the Examiner's allegation lacks merit for at least reasons similar to reasons given

above with regard to claim 1.

For at least these reasons, Applicants submit that claim 32 is patentable over Shultz et al.

and Michalewicz et al., whether taken alone or in any reasonable combination.

Amended independent claim 33 recites features similar to, but possibly different in scope

from, features recited in claim 32. Claim 33 is, therefore, patentable over Shultz et al. and

Michalewicz et al., whether taken alone or in any reasonable combination, for at least reasons

similar to reasons given with regard to claim 32.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-14, 16-19, and 25-33 under 35 U.S.C. § 103 based on <u>Shultz et al.</u> and <u>Michalewicz et al.</u>

<div align="center">

*REJECTION UNDER 35 U.S.C. § 103 BASED ON*
*SHULTZ ET AL., MICHALEWICZ ET AL., AND RUBENCZYK ET AL.*

</div>

In paragraph 8 of the final Office Action, the Examiner rejected claims 15 and 20-24 under 35 U.S.C. § 103(a) as allegedly unpatentable over <u>Shultz et al.</u> in view of <u>Michalewicz et al.</u> and <u>Rubenczyk et al.</u>  Applicants respectfully traverse the rejection.

Claims 15 and 20-24 depend from claim 1.  Without acquiescing in the Examiner's rejection with regard to claims 15 and 20-24, Applicants respectfully submit that the disclosure of <u>Rubenczyk et al.</u> does not cure the deficiencies in the disclosures of <u>Shultz et al.</u> and <u>Michalewicz et al.</u> identified above with regard to claim 1.  Therefore, claims 15 and 20-24 are patentable over <u>Shultz et al.</u>, <u>Michalewicz et al.</u>, and <u>Rubenczyk et al.</u>, whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 15 and 20-24 under 35 U.S.C. § 103 based on <u>Shultz et al.</u>, <u>Michalewicz et al.</u>, and <u>Rubenczyk et al.</u>

<div align="center">

*CONCLUSION*

</div>

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of the pending claims.

As Applicants' remarks with respect to the Examiner's rejections overcome the

rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, etc.) is not a concession by Applicants that such assertions are accurate or that such requirements have been met, and Applicants reserve the right to dispute these assertions/requirements in the future.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-33 in condition for allowance. Applicants submit that the proposed amendments do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner. Therefore, this Amendment should allow for immediate action by the Examiner. Further, Applicants submit that the entry of this Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

If the Examiner believes that the application is not now in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned to discuss any outstanding issues.

To the extent necessary, a petition for an extension of time under 35 C.F.R. 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess

fees to such deposit account.

Respectfully submitted,

HARRITY SNYDER, LLP


By: /Paul A. Harrity/
     Paul A. Harrity
     Reg. No. 39,574

Date:   November 15, 2006

11350 RANDOM HILLS ROAD
SUITE 600
FAIRFAX, VIRGINIA 22030
TELEPHONE: 571-432-0800
FACSIMILE: 571-432-0808